AMENDMENTS TO THE CLAIMS

1. (Original). A method for treating Alzheimer's disease (AD), comprising:

stimulating sphenopalatine ganglion (SPG)-related tissue of a subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in clearance of an AD-related constituent of a central nervous system (CNS) of the subject, from a brain of the subject to a systemic blood circulation of the subject, so as to treat the AD.

2. - 4. (Canceled)

5. (Currently Amended) The method according to ~~any one of claims 1 or 3~~ claim 1, wherein stimulating the SPG-related tissue comprises directly stimulating the SPG.

6. (Currently Amended) The method according to ~~any one of claims 1-4~~ claim 1, wherein the AD-related constituent includes an inflammatory-related constituent, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the inflammatory-related constituent.

7. - 9. (Canceled)

10. (Currently Amended) The method according to ~~any one of claims 1-4~~ claim 1, wherein the AD-related constituent includes a DNA fragment, and

wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the DNA fragment.

11. (Currently Amended) The method according to ~~any one of claims 1-4~~ claim 1, wherein the AD-related constituent includes an RNA fragment, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the RNA fragment.

12. (Currently Amended) The method according to ~~any one of claims 1-4~~ claim 1, wherein the AD-related constituent includes a cytokine, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the cytokine.

13. (Currently Amended) The method according to ~~any one of claims 1-4~~ claim 1, wherein the AD-related constituent includes a marker of neuronal death or degeneration, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the marker.

14. (Currently Amended) The method according to ~~any one of claims 1-4~~ claim 1, wherein the AD-related constituent includes a marker of an inflammatory process, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the clearance of the marker.

15. - 18. (Canceled)

19. (Original) A method for treating Alzheimer's disease (AD), comprising:

supplying a pharmaceutical agent to a systemic blood circulation of a subject;

stimulating sphenopalatine ganglion (SPG)-related tissue of the subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in passage of the pharmaceutical agent from the systemic blood circulation into a central nervous system (CNS) of the subject, so as to treat the AD.

20. (Original) The method according to claim 19, wherein stimulating the SPG-related tissue comprises directly stimulating the SPG.

21. - 22. (Canceled)

23. (Currently Amended) The method according to ~~any one of claims 19 or 21~~ claim 19, wherein the pharmaceutical agent includes a glutamate receptor antagonist, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the glutamate receptor antagonist.

24. (Currently Amended) The method according to ~~any one of claims 19 or 21~~ claim 19, wherein the pharmaceutical agent includes an NMDA receptor blocker, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the NMDA receptor blocker.

25. - 26. (Canceled)

27. (Currently Amended) The method according to ~~any one of claims 19 or 21~~ claim 19, wherein the pharmaceutical agent includes a stimulant of nerve regeneration, and wherein configuring the stimulation comprises

configuring the stimulation so as to cause the increase in the passage of the stimulant.

28. - 29. (Canceled)

30. (Currently Amended) The method according to ~~any one of claims 19 or 21~~ claim 19, wherein the pharmaceutical agent includes a microglial activation modulator, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the microglial activation modulator.

31. (Currently Amended) The method according to ~~any one of claims 19 or 21~~ claim 19, wherein the pharmaceutical agent includes an antioxidant, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the antioxidant.

32. (Canceled)

33. (Currently Amended) The method according to ~~any one of claims 19 or 21~~ claim 19, wherein the pharmaceutical agent includes an inhibitor of protein tyrosine phosphatases, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the inhibitor.

34. (Currently Amended) The method according to ~~any one of claims 19 or 21~~ claim 19, wherein the pharmaceutical agent includes a medium chain triglyceride, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the medium chain triglyceride.

35. - 39. (Canceled)

40. (Currently Amended) The method according to ~~any one of claims 19 or 21~~ claim 19, wherein the pharmaceutical agent is selected from the list consisting of: an AD vaccine, a component of an AD vaccine, and a derivative of an AD vaccine, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in the passage of the selected pharmaceutical agent.

41. - 46. (Canceled)

47. (Original) A method for treating Alzheimer's disease (AD), comprising:

stimulating sphenopalatine ganglion (SPG)-related tissue of the subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in cerebral blood flow (CBF) of the subject, so as to treat the AD.

48. (Original) The method according to claim 47, wherein stimulating the SPG-related tissue comprises directly stimulating the SPG.

49. - 50. (Canceled)

51. (Original) A method for diagnosing Alzheimer's disease (AD), comprising:

stimulating sphenopalatine ganglion (SPG)-related tissue of a subject by applying an electrical signal to the SPG-related tissue, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in molecular passage between a central nervous system (CNS) of the subject and another body compartment of the subject, so as to facilitate a diagnosis of the AD.

52. (Original) The method according to claim 51, wherein stimulating the SPG-related tissue comprises directly stimulating the SPG.

53. (Original) A method for diagnosing Alzheimer's disease (AD), comprising:

stimulating sphenopalatine ganglion (SPG)-related tissue of a subject by presenting an odorant to an air passage of the subject, the SPG-related tissue selected from: an SPG of the subject and nerve fibers of the subject which are directly anatomically connected to the SPG; and

configuring the stimulation so as to cause an increase in molecular passage between a central nervous system (CNS) of the subject and another body compartment of the subject, so as to facilitate a diagnosis of the AD.

54. (Currently Amended) The method according to ~~any one of claims 51 or 53~~ claim 51, and comprising measuring a constituent of the other body compartment.

55. (Currently Amended) The method according to ~~any one of claims 51 or 53~~ claim 51, wherein the other body compartment includes a systemic blood circulation of the subject, and wherein configuring the stimulation comprises configuring the stimulation so as to cause the increase in molecular passage between the CNS and the systemic blood circulation.

56. - 83. (Canceled)

84. (Original) A method for diagnosing Alzheimer's disease (AD), comprising presenting an odorant to an air passage of the subject, the odorant

having been selected for presentation to the air passage because it is such as to cause an increase in molecular passage between a central nervous system (CNS) of the subject and another body compartment of the subject, so as to facilitate a diagnosis of the AD.

85. - 88. (Canceled)

89. (Currently Amended) The method according to ~~any one of claims 2, 4, 21, 49, 53, 61, 71, 78, 80, 82, 84, 86 or 88~~ claim 53, and comprising presenting in association with the odorant an analgesic in a dosage configured to reduce a sensation associated with the presenting of the odorant.

90. (Currently Amended) The method according to ~~any one of claims 2, 4, 21, 49, 53, 61, 71, 78, 80, 82, 84, 86, or 88~~ claim 53, wherein the air passage includes a nasal cavity of the patient, and wherein presenting the odorant comprises presenting the odorant to the nasal cavity.

91. (Currently Amended) The method according to ~~any one of claims 2, 4, 21, 49, 53, 61, 71, 78, 80, 82, 84, 86, or 88~~ claim 53, wherein the air passage includes a throat of the patient, and wherein presenting the odorant comprises presenting the odorant to the throat.

92. (Currently Amended) The method according to ~~any one of claims 2, 4, 21, 49, 53, 61, 71, 78, 80, 82, 84, 86, or 88~~ claim 53, wherein the odorant is selected from the list consisting of: propionic acid, cyclohexanone, and amyl acetate, and wherein presenting the odorant comprises presenting the selected odorant.

93. (Currently Amended) The method according to ~~any one of claims 2, 4, 21, 49, 53, 61, 71, 78, 80, 82, 84, 86, or 88~~ claim 53, wherein the odorant is selected from the list consisting of: acetic acid, citric acid, carbon dioxide,

sodium chloride, and ammonia, and wherein presenting the odorant comprises presenting the selected odorant.

94. (Currently Amended) The method according to ~~any one of claims 2, 4, 21, 49, 53, 61, 71, 78, 80, 82, 84, 86, or 88~~ claim 53, wherein the odorant is selected from the list consisting of: menthol, alcohol, nicotine, piperine, gingerol, zingerone, allyl isothiocyanate, cinnamaldehyde, cuminaldehyde, 2-propenyl/2-phenylethyl isothiocyanate, thymol, and eucalyptol, and wherein presenting the odorant comprises presenting the selected odorant.

95. - 177. (Canceled)